

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Letters Patent of:
Katsumi SAKITANI et al.

Patent No.: 7,434,414 B2

Issued: October 14, 2008

For: REFRIGERATION APPARATUS

**REQUEST FOR CERTIFICATE OF CORRECTION
PURSUANT TO 37 CFR 1.323**

Attention: Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Madam:

Upon reviewing the above-identified patent, Patentee noted typographical errors which should be corrected.

On the face of the Patent:

On the face of the Patent, Item (56) References Cited, Japanese References JP-3-172587-A and JP-3-137457-A filed with the Information Disclosure Statement filed on September 8, 2006, and considered by the Examiner have been entirely omitted from the printed patent. Please include these references.

Also on the face of the Patent, Item (56) References Cited, Japanese Reference "JP-2000-32916-A" should read --JP-2000-329416-A--.

The errors were found in the application as filed by applicant. Please charge our Deposit Account No. 02-2448 in the amount of \$100.00 covering the fee set forth in 37 CFR 1.20(a).

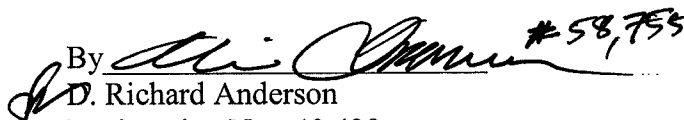
The errors now sought to be corrected are inadvertent typographical errors the correction of which does not involve new matter or require reexamination.

Transmitted herewith is a proposed Certificate of Correction effecting such amendment. Patentee respectfully solicits the granting of the requested Certificate of Correction.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Dated: December 12, 2008

Respectfully submitted,

By  #58,755
D. Richard Anderson
Registration No.: 40,439
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

Page 1 of 1

PATENT NO. : 7,434,414 B2
APPLICATION NO. : 10/541,590
ISSUE DATE : October 14, 2008
INVENTOR(S) : Katsumi SAKITANI et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Face of the Patent, Item (56) References cited:

The following two references should be included on the face of the printed patent:

JP-3-172587-A and JP-3-137457-A

On the Face of the Patent, Item (56) References cited:

The reference reading "JP-2000-32916-A" should read --JP-2000-329416-A--.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

D. Richard Anderson
BIRCH, STEWART, KOLASCH & BIRCH, LLP 1
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747



PTO/SB/08a/b (07-06)

Approved for use through 09/30/2006. OMB 0651-0031

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|---|---|--------------------------|------------------------|------------------------|---------------|
| Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | 10/541,590-Conf. #7820 | | |
| | | Filing Date | July 7, 2005 | | |
| | | First Named Inventor | Katsumi SAKITANI | | |
| | | Art Unit | 3744 | | |
| | | Examiner Name | Not Yet Assigned | | |
| Sheet | 1 | of | 1 | Attorney Docket Number | 4633-0140PUS1 |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------------------|--------------------------|---|--------------------------------|--|---|
| Examiner Initials ¹ | Cite No. ¹ | Document Number Number-Kind Code ² (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | AA | 6,484,519 | 11-26-2002 | Hesse et al. | |

| FOREIGN PATENT DOCUMENTS | | | | | | |
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| Examiner Initials ¹ | Cite No. ¹ | Foreign Patent Document Country Code ³ -Number-Kind Code ⁴ (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁵ |
| | BA | JP-3-172587-A | 07-25-1991 | | | |
| | BB | JP-3-137457-A | 06-12-1991 | | | |
| | BC | JP-2003-279179 | 10-02-2003 | | | |

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ²Applicant's unique citation designation number (optional). ³See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ⁴Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁷Applicant is to place a check mark here if English language Translation is attached.

| NON PATENT LITERATURE DOCUMENTS | | | |
|---------------------------------|--------------------------|---|----------------|
| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | | |

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

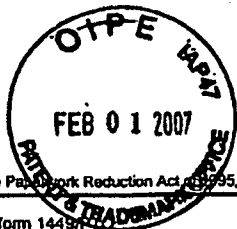
²Applicant's unique citation designation number (optional). ³Applicant is to place a check mark here if English language Translation is attached.

| | | | |
|-----------------------|--|--------------------|--------|
| Examiner Signature | | Date Considered | 1/3/08 |
|-----------------------|--|--------------------|--------|

Birch, Stewart, Kolasch & Birch, LLP

DRA/mag

Copied from 10451590 on 09/18/2006



PTO/SB/08A/B (09-06)

Approved for use through 03/31/2007. OMB 0551-0031

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|---|---|--------------------------|------------------|------------------------|---------------|
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | 10/541,590 | | |
| | | Filing Date | July 7, 2005 | | |
| | | First Named Inventor | Katsumi SAKITANI | | |
| | | Art Unit | 3744 | | |
| | | Examiner Name | Not Yet Assigned | | |
| Sheet | 1 | of | 1 | Attorney Docket Number | 4633-0140PUS1 |

| U.S. PATENT DOCUMENTS | | | | | |
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| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number-Kind Code ² (if known) | | | |
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| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ³ |
| | | Country Code ³ -Number-Kind Code ² (if known) | | | | |
| | BA | JP-2000-32916-A | 11-30-2000 | | | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

| NON PATENT LITERATURE DOCUMENTS | | | |
|---------------------------------|--------------------------|---|----------------|
| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
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|-----------------------|--|--------------------|--------|
| Examiner Signature | | Date Considered | 1/3/08 |
|-----------------------|--|--------------------|--------|

Birch, Stewart, Kolasch & Birch, LLP

DRA/srm

(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開2000-329416

(P2000-329416A)

(43) 公開日 平成12年11月30日 (2000. 11. 30)

(51) Int.Cl.⁷

F 2 5 B 1/00

識別記号

3 9 5

3 3 1

F I

F 2 5 B 1/00

テーマコード(参考)

3 9 5 Z

3 3 1 F

審査請求 未請求 請求項の数18 O L (全 19 頁)

(21) 出願番号 特願平11-354817

(22) 出願日 平成11年12月14日 (1999. 12. 14)

(31) 優先権主張番号 特願平11-68871

(32) 優先日 平成11年3月15日 (1999. 3. 15)

(33) 優先権主張国 日本 (J P)

(71) 出願人 000004260

株式会社デンソー

愛知県刈谷市昭和町1丁目1番地

(71) 出願人 000004695

株式会社日本自動車部品総合研究所

愛知県西尾市下羽角町岩谷14番地

(72) 発明者 山中 康司

愛知県刈谷市昭和町1丁目1番地 株式会
社デンソー内

(74) 代理人 100100022

弁理士 伊藤 洋二 (外2名)

最終頁に続く

(54) 【発明の名称】 冷凍サイクル

(57) 【要約】

【課題】 蒸発器内の圧力が上昇したときであっても、冷凍能力が大きく低下してしまうことを防止する。

【解決手段】 膨張機130にて膨張する主流冷媒の膨張エネルギーを機械エネルギーに変換し(膨張仕事をさせ)ながら主流冷媒を減圧するとともに、その変換された機械エネルギーにより第2圧縮機140を稼働させる。これにより、熱交換器123を流出した主流冷媒は、等エントロピー変化をしながらそのエンタルピーを低下させていくので、蒸発器150内の圧力が上昇したときであっても、冷凍能力が大きく低下してしまうことを防止できる。

